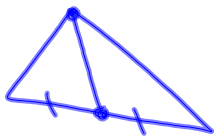
8.1

Midpoint $M\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$

Distance

Median of 

$d = \sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

8.2

$\left|\frac{1}{4a}\right|$ = distance
- b/w Focus + Vertex
- b/w Directrix + Vertex

$\left|\frac{1}{a}\right|$ = Latus Rectum

up/down $y = a(x-h)^2 + k$

left/right $x = a(y-k)^2 + h$

8.3

$r^2 = (x-h)^2 + (y-k)^2$

$r \rightarrow$ radius

$C(h,k)$

- diameter endpts

- 8.2/3 Complete the square